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EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT PAPER NUMBER

2161

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/476,618

Applicant(s)

KURZYNSKI ET AL.

Examiner

Etienne P LeRoux

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 48-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 48-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Claim Status

Claims 48-53 are pending; claims 1-47 having been cancelled. Claims 48-53 are rejected as detailed below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 48-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 5,734,915 issued to Roewer in view of US Pat No 6,137,860 issued to Ellegood et al (hereafter Ellegood).

Claims 48 and 52:

Roewer discloses opening a plurality of medical image files to display a plurality of medical images [Figs 4A-4C, col 3, lines 35-48].

Roewer discloses the elements of the claimed invention as noted above but does not disclose prioritizing the plurality of medical image files using a prioritization scheme having at least three levels

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including a first level comprising a currently viewed medical image; a second level comprising medical images in a viewing stack; and a third level comprising medical images related to medical images with a higher priority; wherein the medical images from the first level are designated with a higher priority than the medical images of the second level and the medical images of the second level are designated with a higher priority than the medical images of the third level; and unloading from the memory of the workstation a medical image file having a lower priority than at least one of the open medical image files stored in memory, wherein the unloaded medical image file includes at least a portion of at least one of the open medical images. Ellegood discloses prioritizing the plurality of image files using a prioritization scheme having at least three levels including a first level comprising a currently viewed medical image; a second level comprising images in a viewing stack; and a third level comprising medical images related to images with a higher priority; wherein the images from the first level are designated with a higher priority than the images of the second level and the images of the second level are designated with a higher priority than the images of the third level; and unloading from the memory of the workstation a image file having a lower priority than at least one of the medical image files stored in memory, wherein the unloaded image file includes at least a portion of at least one of the open medical images [Fig 7, col 15, lines 13-25]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Roewer to include prioritizing the plurality of medical image files using a prioritization scheme having at least three levels including a first level comprising a currently viewed medical image; a second level comprising medical images in a viewing stack; and a third level comprising medical images related to medical images with a higher priority; wherein the medical images from the first level are designated with a higher priority than the medical images of the second level and the medical images of the second level are designated with a higher priority than the medical images of the third level; and unloading from the memory of the workstation a medical image file having a lower priority than at least one of the open medical image files stored in memory, wherein

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the unloaded medical image file includes at least a portion of at least one of the open medical images as taught by Ellegood for the purpose of being able to simultaneously viewing three different images. The skilled technician would have been motivated to modify Roewer per the above such that a user is able to scroll through a plurality of images and make a side-by-side comparison between the three different images such that the user is able to detect possible differences between the images.

Claims 49 and 53:

The combination of Roewer and Ellegood discloses the elements of claim 48 as noted above but does not disclose wherein the third level only comprises open medical images related to open medical images from the first level. Roewer discloses that a non-computer-literate workstation operator can easily choose, arrange, annotate and edit medical source imagery [col 4, lines 64-67], images can be portrayed as an extension of the real world [col 11, line 13], the non-programming operator may combine images from different patients onto a single film [col 11, lines 35-37], the work station operator can drag or insert any displayed image into a frame, remove imagery from a frame or transfer the image to another frame [col 12, lines 5-10]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Roewer and Ellegood to include wherein the third level only comprises open medical images related to open medical images from the first level for the purpose of inserting a medical image of another patient in the second level. The skilled artisan would have been motivated to modify the combination of Roewer and Ellegood per the above such that the workstation operator is able to make a comparison between the images of a first patient portrayed on the first and third levels with the image of a second patient portrayed on the second level.

Claim 50:

The combination of Roewer and Ellegood discloses the elements of claim 48 as noted above and furthermore, Roewer discloses further comprising the step of saving the visual display settings [frame record, col 17, lines 38-52] of the unloaded medical image file such that if the unloaded medical image

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file is not closed and a user decides to redisplay the unloaded image file, the unloaded medical image file appears virtually open to the user and as if the unloaded medical image file had not been unloaded [refresh Window redraws a PCW window with all its contents, col 13, lines 64-67].

Claim 51:

The combination of Roewer and Ellegood discloses the elements of claim 48 as noted above and furthermore, Roewer discloses wherein the unloaded open medical image file is transferred to a storage device connected to the workstation by a network [col 8, lines 15-33].

Response to Arguments

Applicant's arguments filed 5/19/2005, have been carefully considered but they are not persuasive.

Applicant Argues:

Applicant states in the second paragraph of page 5, "Roewer '915 fails altogether to teach a prioritization scheme per claims 48 and 52. In addition, Roewer fails to teach or suggest unloading from the memory of the workstation a medical image file having a lower priority than at least one of the open medical image files stored in memory, wherein the unloaded medical image file includes at least a portion of at least one of the open medical images per claims 48 and 52."

Examiner Responds:

Examiner is not persuaded. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Reference to above Office action shows that Roewer discloses a window-oriented environment for formatting film pages of medical images and Ellegood discloses a method of systematically reviewing digital radiographic images (col 11, lines 10-20, Fig 6, lines 16-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of

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Ellegood into the invention of Roewer for the purpose of systematically displaying a plurality of medical images which cannot be simultaneously displayed. Further, regarding above claim limitation, Ellegood's disclosure in column 15, lines 1-25 reads on the claim limitation because Ellegood discloses three thumbnail tile images 704, 706 and 708, refer top right-hand corner of Figure 7. Each new image read in from the digital radiographic camera or from external storage devices is added in the position held by the tile image 704 (representing the most recent addition to the stack) and thus bumping off image 708 which is the oldest addition to the stack. Tile image 708 is thereby deleted from the current tile image memory.

Applicant Argues:

Applicant states in the first paragraph on page 6, "For example, Ellegood fails to teach or suggest a prioritization scheme having three different levels, including a first level comprising a currently viewed medical image, a second level comprising medical images in a viewing stack, and a third level comprising medical images related to medical images with a higher priority. Ellegood fails altogether to teach the third level recited in claims 48 and 52."

Examiner Responds:

Examiner is not persuaded. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Reference to above Office action will show that above claim limitations are rejected over Roewer in view of Ellegood. Roewer discloses medical images and Ellegood discloses the prioritization scheme as discussed below.

MPEP § 2106 requires Office personnel to give claims their broadest reasonable interpretation in light of the supporting disclosure. In *re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). It is necessary to consider "a third level comprising medical images related to medical images with a higher priority." The specification fails to provide a clear and precise meaning of the

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word “related” as used in above claim language. Applicant’s specification states in the second paragraph on page 8:

One patient’s exams for a particular problem or the same portion of his anatomy comprise a set of exams, and when one of these exams is the current exam, then the remaining exams in this set of exams are referred to as related exams to the current exam. For example, continuing the example above of the broken arm, the first, second and third exams of the broken arm can be categorized as related exams to each other.

The above explanation of “related” is ambiguous. In particular, it is unclear when a patient’s exam does not concern a particular problem or the same portion of his/her anatomy and therefore, must be classified as “unrelated.” Examiner will resort to a common dictionary¹ for a broad and reasonable interpretation of “related,” i.e., connected or associated, as by origin or kind. Ellegood discloses a currently viewed image, an image stack and archived images per column 15 reads on the claimed three prioritization levels. Particularly, regarding a third level comprising related images, Ellegood’s disclosure of archive icon 726 which is used to archive tile images from disk to more permanent storage media clearly reads on “related” as defined above because the archived images are associated in kind and origin with the remaining tile images which all concern weld inspection images for a particular aluminum barrel.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory

¹ Webster’s New World College Dictionary, Fourth Edition

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period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P. LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

06/30/2005


MOHAMMAD ALI
PRIMARY EXAMINER